

1. An electronic learning system (ELS) that provides access to an electronic course that is hosted by an external system that is not part of the ELS, the ELS comprising:

a front end that exchanges communications with the external system to obtain access to the electronic course;

a learning portal that runs software to view the electronic course; and

a back end that stores information that relates to the electronic course.

2. The ELS of claim 1, wherein the communications comprise a register command that is transmitted from the front end to the external system to register a user of the ELS with the external system.

3. The ELS of claim 1, wherein the communications comprise an enroll command that is transmitted from the front end to the external system to enroll a user of the ELS in the electronic course.

4. The ELS of claim 1, wherein the communications comprise a launch command that is transmitted from the front end to the external system to start the electronic course.

5. The ELS of claim 1, wherein the communications  
comprise a track command that is transmitted from the front  
end to the external system to track user activity vis-à-vis  
5 the electronic course.

6. The ELS of claim 5, wherein the communications  
comprise a response that is transmitted from the external  
system to the front end following receipt of the track command  
10 by the external system.

7. The ELS of 6, wherein the response comprises at least  
one of the following: a percentage of material from the  
electronic course that has been viewed, a test score  
15 associated with material from the electronic course, and an  
amount of time spent viewing material in the electronic  
course.

8. The ELS of claim 1, wherein the communications  
20 comprise commands transmitted from the ELS to the external  
system and replies from the external system to the ELS.

9. The ELS of claim 8, wherein the commands are transmitted in accordance with simple object access protocol (SOAP).

5           10. The ELS of claim 1, wherein the information comprises metadata, and the back end obtains the metadata from the external system.

10           11. The ELS of claim 10, wherein the metadata comprises a course catalog for the electronic course, the course catalog containing a description of material in the electronic course.

15           12. The ELS of claim 1, wherein the learning portal, the front end, and the back end are implemented on a single computer.

          13. The ELS of claim 1, wherein the learning portal, the front end, and the back end are implemented on multiple computers.

20           14. An electronic learning system (ELS) that incorporates an electronic course that is hosted by an

external system that is not part of the ELS, the ELS  
comprising:

a front end that issues commands to the external system  
to obtain access to the electronic course, the commands

5 comprising:

a register command to register with the external  
system;

an enroll command to enroll in the electronic  
course; and

10 a launch command to launch the electronic course.

15. The ELS of claim 14, wherein the commands further  
comprise a track command to track progress with respect to the  
electronic course.

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16. The ELS of claim 15, wherein the front end receives  
a response to the track command, the response comprising a  
percentage of material from the electronic course that has  
been viewed, a test score associated with material from the  
electronic course, and an amount of time spent viewing  
20 material in the electronic course.

17. The ELS of claim 14, further comprising:

a back end that retrieves metadata from the external system and that updates a course catalog using the metadata, the course catalog comprising a description of material associated with the electronic course.

18. The ELS of claim 14, wherein the commands are

transmitted in accordance with simple object access protocol (SOAP).

19. The ELS of claim 14, wherein the ELS accesses the

external system over a network, the commands being sent from the ELS to the external system over the network.

20. The ELS of claim 19, wherein the network comprises

the Internet.

21. An electronic learning system (ELS) comprising:

a front end to mediate access to an electronic course that is hosted by an external system that is not part of the ELS, the front end interacting with the external system through a series of commands that contain identification and control information for use by the external system, the front

end receiving responses to the commands including a response relating to progress through the electronic course; and

a back end to maintain information on the ELS about the electronic course.

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22. The ELS of claim 21, wherein the back end obtains metadata from the external system, the metadata containing a description of information in the electronic course, the back end storing the metadata in memory on the ELS..

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23. The ELS of claim 21, further comprising:

a learning portal that runs a Web browser to present the electronic course.

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24. The ELS of claim 21, wherein the commands comprise at least one of:

a register command that is transmitted from the front end to the external system to register a user of the ELS with the external system;

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an enroll command that is transmitted from the front end to the external system to enroll a user of the ELS in the electronic course;

a launch command that is transmitted from the front end to the external system to start the electronic course; and

a track command that is transmitted from the front end to the external system to track user activity vis-à-vis the electronic course.

25. The ELS of claim 21, wherein the commands are transmitted according to the simple object access protocol (SOAP).

26. A machine-readable medium that stores executable instructions to access, via an electronic learning system (ELS), an electronic course hosted by an external system that is not part of the ELS, the instructions causing a machine to:

communicate with the external system via a series of commands to register with the external system, enroll in the electronic course, and launch the electronic course; and

maintain a database of information associated with the electronic course.

27. The machine-readable medium of claim 26, wherein the commands further comprise a track command to track progress through the electronic course.

28. The machine-readable medium of claim 26, wherein the commands are transmitted in accordance with simple object access protocol (SOAP).

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29. The machine-readable medium of claim 26, wherein maintaining the database of information comprises:

receiving metadata from the electronic course; and  
updating the database in accordance with the metadata.

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30. The machine-readable medium of claim 29, wherein the database comprises a course catalog that includes information about the electronic course.

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31. The machine-readable medium of claim 26, wherein maintaining the database of information comprises storing information about the external system.

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32. The machine-readable medium of claim 26, wherein communicating with the external system comprises receiving responses to the commands, at least one of the responses comprising at least one of the following: a percentage of material from the electronic course that has been viewed, a



test score associated with material from the electronic course, and an amount of time spent viewing material in the electronic course.

5           33. An electronic learning system (ELS) that provides access to an electronic course that is hosted by an external system that is not part of the ELS, the ELS comprising:

          means for exchanging communications with the external system to obtain access to the electronic course;

10           means for presenting the electronic course; and

          means for collecting information that relates to the electronic course.

          34. The ELS of claim 33, wherein the means for  
15 exchanging comprises one or more servers to mediate access to the electronic course, the one or more servers exchanging communications with the external system through a series of commands that contain identification and control information for use by the external system, the one or more servers  
20 receiving responses to the commands, the responses comprising a response relating to progress through the electronic course and a response providing the ELS with access to the electronic course.

35. A network comprising:

a first ELS that hosts an electronic course; and

a second ELS that accesses the electronic course over a  
5 network via a series of commands and responses, the series of  
commands and responses comprising:

a register command transmitted from the second ELS  
to the first ELS to register with the first ELS;

an enroll command transmitted from the second ELS to  
10 the first ELS to enroll in the electronic course;

a launch command transmitted from the second ELS to  
the first ELS to launch the electronic course; and

a response to the launch command, the response being  
transmitted from the first ELS to the second ELS  
15 following receipt of the launch command by the first ELS,  
the response making accessible material from the  
electronic course to the second ELS.

36. The network of claim 35, wherein the response  
20 comprises a hypertext transfer protocol (HTTP) command that  
directs the second ELS to the material.

37. The network of claim 35, wherein the response comprises a uniform resource locator (URL) that can be used to link to the material.